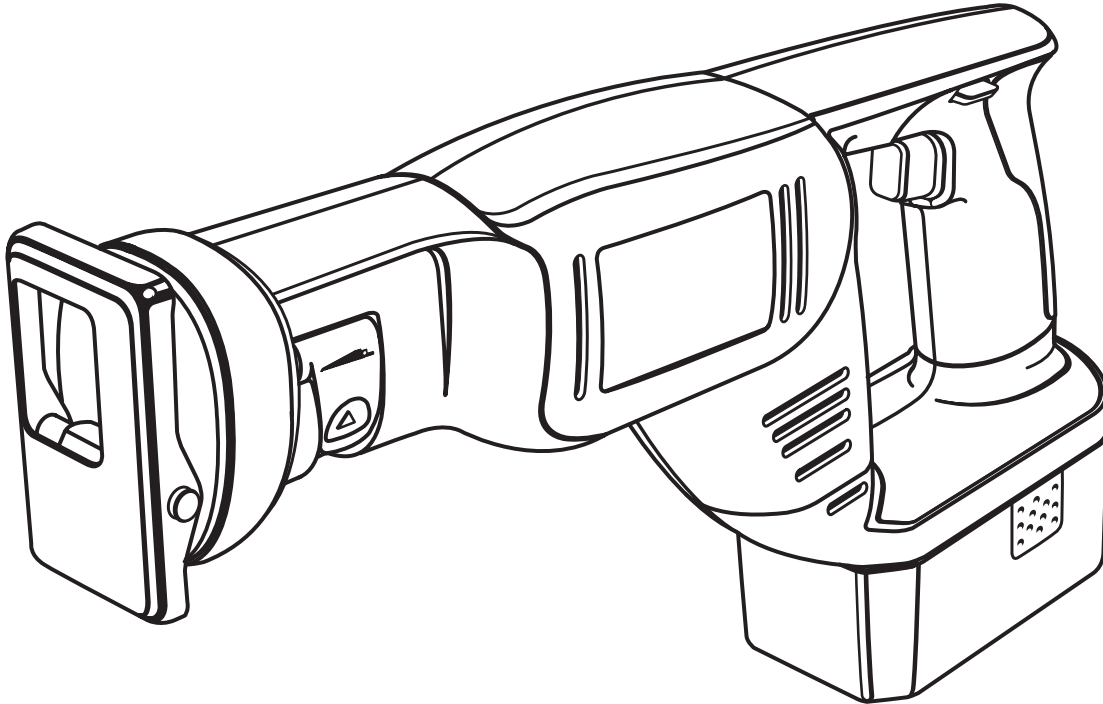




OPERATOR'S MANUAL 18 VOLT CORDLESS RECIPROCATING SAW MODEL NO. RJC181



SPECIFICATIONS:	
Length of Stroke	7/8 in. (22 mm)
Strokes Per Minute	0-3,000 SPM
Motor	18 Volt DC
Switch	Variable Speed With Brake
Charger Rating	120 Volts, 60 Hz, AC
Charger Rate	1 Hour
Net Weight	6.16 lbs. (2.8 kg.)

THANK YOU FOR BUYING A RYOBI CORDLESS RECIPROCATING SAW.

Your new cordless reciprocating saw has been engineered and manufactured to Ryobi's high standard for dependability, ease of operation, and operator safety. Properly cared for, it will give you years of rugged, trouble-free performance.

CAUTION: Carefully read through this entire operator's manual before using your new cordless reciprocating saw.

Pay close attention to the Rules for Safe Operation, Warnings, and Cautions. If you use your cordless reciprocating saw properly and only for what it is intended, you will enjoy years of safe, reliable service.

Thank you again for buying Ryobi tools.

SAVE THIS MANUAL FOR FUTURE REFERENCE

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GENERAL SAFETY RULES



WARNING:

Read and understand all instructions. Failure to follow all instructions listed below, may result in electric shock, fire, and/or serious personal injury.

SAVE THESE INSTRUCTIONS

Work Area

- **Keep your work area clean and well lit.** Cluttered benches and dark areas invite accidents.
- **Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases, or dust.** Power tools may create sparks which may ignite the dust or fumes.
- **Keep bystanders, children, and visitors away while operating a power tool.** Distractions can cause you to lose control.

Electrical Safety

- **Do not abuse the cord. Never use the cord to carry the charger. Keep cord away from heat, oil, sharp edges, or moving parts. Replace damaged cords immediately.** Damaged cords may create a fire.
- **A battery operated tool with integral batteries or a separate battery pack must be charged only with the specified charger for the battery.** A charger that may be suitable for one type of battery may create a risk of fire when used with another battery. Use battery only with charger listed.

MODEL	BATTERY PACK	CHARGER
RJC181	1322401, 1323303 130224007, or 130256001	1423701

- **Use battery operated tool only with specified designated battery pack.** Use of any other batteries may create a risk of fire. Use only with battery pack listed.

Personal Safety

- **Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use tool while tired or under the influence of drugs, alcohol, or medication.** A moment of inattention while operating power tools may result in serious personal injury.
- **Dress properly. Do not wear loose clothing or jewelry. Contain long hair. Keep your hair, clothing, and gloves away from moving parts.** Loose clothes, jewelry, or long hair can be caught in moving parts.
- **Avoid accidental starting. Be sure switch is in the locked or off position before inserting battery pack.** Carrying tools with your finger on the switch or inserting the battery pack into a tool with the switch on, invites accidents.
- **Remove adjusting keys or wrenches before turning the tool on.** A wrench or a key that is left attached to a rotating part of the tool may result in personal injury.
- **Do not overreach. Keep proper footing and balance at all times.** Proper footing and balance enables better control of the tool in unexpected situations. Do not use on a ladder or unstable support.
- **Use safety equipment. Always wear eye protection.** Dust mask, nonskid safety shoes, hard hat, or hearing protection must be used for appropriate conditions.

GENERAL SAFETY RULES

Tool Use and Care

- **Use clamps or other practical way to secure and support the workpiece to a stable platform.** Holding the work by hand or against your body is unstable and may lead to loss of control.
- **Do not force tool. Use the correct tool for your application.** The correct tool will do the job better and safer at the rate for which it is designed.
- **Do not use tool if switch does not turn it on and off.** A tool that cannot be controlled with the switch is dangerous and must be repaired.
- **Disconnect battery pack from tool before making any adjustments, changing accessories, or storing the tool.** Such preventive safety measures reduce the risk of starting the tool accidentally.
- **Store idle tools out of the reach of children and other untrained persons.** Tools are dangerous in the hands of untrained users.
- **When battery pack is not in use, keep it away from other metal objects like: paper clips, coins, keys, nails, screws, or other small metal objects that can make a connection from one terminal to another.** Shorting the battery terminals together may cause sparks, burns, or a fire.

- **Maintain tools with care. Keep cutting tools sharp and clean.** Properly maintained tools with sharp cutting edges are less likely to bind and are easier to control.
- **Check for misalignment or binding of moving parts, breakage of parts, and any other condition that may affect the tool's operation. If damaged, have the tool serviced before using.** Many accidents are caused by poorly maintained tools.
- **Use only accessories that are recommended by the manufacturer for your model.** Accessories that may be suitable for one tool, may create a risk of injury when used on another tool.

Service

- **Tool service must be performed by a qualified repair personnel.** Service or maintenance performed by unqualified personnel could result in a risk of injury.
- **When servicing a tool, use only identical replacement parts. Follow instructions in the Maintenance section of this manual.** Use of unauthorized parts or failure to follow Maintenance Instructions may create a risk of shock or injury.

SPECIFIC SAFETY RULES

Hold tool by insulated gripping surfaces when performing an operation where the cutting tool may contact hidden wiring. Contact with a "live" wire will make exposed metal parts of the tool "live" and shock the operator.

Additional Rules For Safe Operation

- **Know your power tool. Read operator's manual carefully. Learn its applications and limitations, as well as the specific potential hazards related to this tool.** Following this rule will reduce the risk of electric shock, fire, or serious injury.
- **Make sure your extension cord is in good condition. When using an extension cord, be sure to use one heavy enough to carry the current your product will draw. A wire gage size (A.W.G.) of at least 16 is recommended for an extension cord 100 feet or less in length. A cord exceeding 100 feet is not recommended. If in doubt, use the next heavier gage. The smaller the gage number, the heavier the cord. An undersized cord will cause a drop in line voltage resulting in loss of power and overheating.**

Important Rules For Battery Tools

- **Battery tools do not have to be plugged into an electrical outlet; therefore, they are always in operating condition. Be aware of possible hazards when not using your battery tool or when changing accessories.** Following this rule will reduce the risk of electric shock, fire, or serious personal injury.
- **Do not place battery tools or their batteries near fire**

or heat. This will reduce the risk of explosion and possible injury.

WARNING:

Batteries vent hydrogen gas and can explode in the presence of a source of ignition, such as a pilot light. To reduce the risk of serious personal injury, never use any cordless product in the presence of open flame. An exploded battery can propel debris and chemicals. If exposed, flush with water immediately.

- **Do not charge battery tool in a damp or wet location.** Following this rule will reduce the risk of electric shock.
- **For best results, your battery tool should be charged in a location where the temperature is more than 50°F but less than 100°F. Do not store outside or in vehicles.**
- **Under extreme usage or temperature conditions, battery leakage may occur. If liquid comes in contact with your skin, wash immediately with soap and water, then neutralize with lemon juice or vinegar. If liquid gets into your eyes, flush them with clean water for at least 10 minutes, then seek immediate medical attention.** Following this rule will reduce the risk of serious personal injury.

IMPORTANT SAFETY INSTRUCTIONS FOR CHARGER



WARNING:

Never use a battery that has been dropped or received a sharp blow. A damaged battery is subject to explosion. Properly dispose of a dropped battery immediately. Failure to heed this warning can result in serious personal injury.

- **Save these instructions. This manual contains important safety and operating instructions for battery charger part number 1423701.** Following this rule will reduce the risk of electric shock, fire, or serious personal injury.
- **Before using battery charger, read all instructions and cautionary markings in this manual, on battery charger, and product using battery charger.** Following this rule will reduce the risk of electric shock, fire, or serious personal injury.



CAUTION:

To reduce the risk of injury, charge only nickel-cadmium rechargeable batteries. Other types of batteries may burst causing personal injury and damage. Following this rule will reduce the risk of electric shock, fire, or serious personal injury.

- **Do not expose charger to rain or snow.** Following this rule will reduce the risk of electric shock, fire, or serious personal injury.
- **Use of an attachment not recommended or sold by the battery charger manufacturer may result in a risk of fire, electric shock, or injury to persons.** Following this rule will reduce the risk of electric shock, fire, or serious personal injury.
- **To reduce the risk of damage to charger body and cord, pull by charger plug rather than cord when disconnecting charger.** Following this rule will reduce the risk of serious personal injury.
- **Make sure cord is located so that it will not be stepped on, tripped over, or otherwise subjected to damage or stress.** Following this rule will reduce the risk of serious personal injury.
- **An extension cord should not be used unless absolutely necessary.** Use of improper extension cord could result in a risk of fire and electric shock. If extension cord must be used, make sure:
 - a. That pins on plug of extension cord are the same number, size and shape as those of plug on charger.
 - b. That extension cord is properly wired and in good electrical condition; and
 - c. That wire size is large enough for AC ampere rating of charger as specified below:

Cord Length (Feet)	25'	50'	100'
Cord Size (AWG)	16	16	16

Note: AWG = American Wire Gage

- **Do not operate charger with a damaged cord or plug. If damaged, have replaced immediately by a qualified serviceman.** Following this rule will reduce the risk of electric shock, fire, or serious personal injury.
- **Do not operate charger if it has received a sharp blow, been dropped, or otherwise damaged in any way; take it to a qualified serviceman.** Following this rule will reduce the risk of electric shock, fire, or serious personal injury.
- **Do not disassemble charger; take it to a qualified serviceman when service or repair is required. Incorrect reassembly may result in a risk of electric shock or fire.** Following this rule will reduce the risk of electric shock, fire, or serious personal injury.
- **To reduce the risk of electric shock, unplug charger from outlet before attempting any maintenance or cleaning. Turning off controls will not reduce this risk.** Following this rule will reduce the risk of electric shock, fire, or serious personal injury.
- **Do not use charger outdoors.** Following this rule will reduce the risk of electric shock, fire, or serious personal injury.
- **Disconnect charger from power supply when not in use.** Following this rule will reduce the risk of electric shock, fire, or serious personal injury.



DANGER:

RISK OF ELECTRIC SHOCK. DO NOT TOUCH UNINSULATED PORTION OF OUTPUT CONNECTOR OR UNINSULATED BATTERY TERMINAL.

- **Save these instructions. Refer to them frequently and use them to instruct others who may use this tool. If you loan someone this tool, loan them these instructions also.** Following this rule will reduce the risk of electric shock, fire, or serious personal injury.



WARNING:



Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- lead from lead-based paints,
- crystalline silica from bricks and cement and other masonry products, and
- arsenic and chromium from chemically-treated lumber.

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.

SYMBOLS

Important: Some of the following symbols may be used on your tool. Please study them and learn their meaning. Proper interpretation of these symbols will allow you to operate the tool better and safer.

SYMBOL	NAME	DESIGNATION/EXPLANATION
V	Volts	Voltage
A	Amperes	Current
Hz	Hertz	Frequency (cycles per second)
min	Minutes	Time
~	Alternating Current	Type or a characteristic of current
==	Direct Current	Type or a characteristic of current
n_0	No Load Speed	Rotational speed, at no load
.../min	Revolutions or Reciprocation Per Minute	Revolutions, strokes, surface speed, orbits etc. per minute
	Safety Alert Symbol	Indicates danger, warning or caution. It means attention!!! Your safety is involved.
	Wet Conditions Alert	Do not expose to rain or use in damp locations.

The purpose of safety symbols is to attract your attention to possible dangers. The safety symbols, and the explanations with them, deserve your careful attention and understanding. The safety warnings do not by themselves eliminate any danger. The instructions or warnings they give are not substitutes for proper accident prevention measures.

SYMBOL MEANING



DANGER: Failure to obey a safety warning will result in serious injury to yourself or to others. Always follow the safety precautions to reduce the risk of fire, electric shock and personal injury.



WARNING: Failure to obey a safety warning can result in serious injury to yourself or to others. Always follow the safety precautions to reduce the risk of fire, electric shock and personal injury.



CAUTION: Failure to obey a safety warning may result in property damage or personal injury to yourself or to others. Always follow the safety precautions to reduce the risk of fire, electric shock and personal injury.

NOTE: Advises you of information or instructions vital to the operation or maintenance of the equipment.

SAVE THESE INSTRUCTIONS

FEATURES

KNOW YOUR RECIPROCATING SAW

See Figure 1.

Before attempting to use your reciprocating saw, familiarize yourself with all operating features and safety requirements.

WARNING:

Carefully read through this entire operator's manual before using your new reciprocating saw. Pay close attention to all Safety Rules, Warnings and Cautions. If you use your reciprocating saw properly and only for what it is intended, you will enjoy years of safe, reliable service.

Your reciprocating saw has been shipped completely assembled except for the blade. Inspect saw carefully to make sure no breakage or damage has occurred during shipping. If any parts are damaged or missing, contact your nearest Authorized Service Center to obtain replacement parts before attempting to operate saw. A blade and this operator's manual are also included.

WARNING:

If any parts are missing, do not operate your saw until the missing parts are replaced. Failure to do so could result in possible serious personal injury.

If any parts are damaged or missing, please call 1-800-525-2579 for assistance.

TOOLLESS BLADE CLAMP

Your saw has a blade clamp design that does not require the use of a tool (blade wrench) when installing or removing the blade. Simply lift blade clamp lock / release lever, located on side of saw, insert blade between blade clamp and saw bar as far as possible, then release lever to lock position.

BLADE SELECTION

To obtain the best performance from your saw it is important to select a specific blade for the particular application and type of material you wish to cut. By doing this you will get a smoother faster cut and prolong blade life. Replacement blades for this saw are available from your nearest Ryobi dealer.

WARNING:



The operation of any power tool can result in foreign objects being thrown into your eyes, which can result in severe eye damage. Before beginning power tool operation, always wear safety goggles or safety glasses with side shields and a full face shield when needed. We recommend Wide Vision Safety Mask for use over eyeglasses or standard safety glasses with side shields. Always use eye protection which is marked to comply with ANSI Z87.1.

LOCK-OFF BUTTON

Your saw is equipped with a "lock-off" button which reduces the possibility of accidental starting. The lock-off button is located on the handle above the switch trigger. You must depress the lock-off button in order to pull the switch trigger. The lock resets each time the trigger is released. **Note:** You can depress the lock-off button from either the left or right side.

SWITCH

To turn your saw **ON**, depress the lock-off button and pull switch trigger. Release switch trigger to turn your saw **OFF**.

VARIABLE SPEED

This tool has a variable speed switch that delivers higher speed with increased trigger pressure. Speed is controlled by the amount of switch trigger depression.

APPLICATIONS

(Use only for the purposes listed below)

- Cutting all types of wood products (lumber, plywood, paneling, composition board, and hard wood).
- Cutting masonite and plastic.
- Cutting drywall.
- Cutting metals such as sheet steel, pipe, steel rods, aluminum, brass, and copper.

WARNING:

Do not allow familiarity with your saw to make you careless. Remember that a careless fraction of a second is sufficient to inflict severe injury.

FEATURES

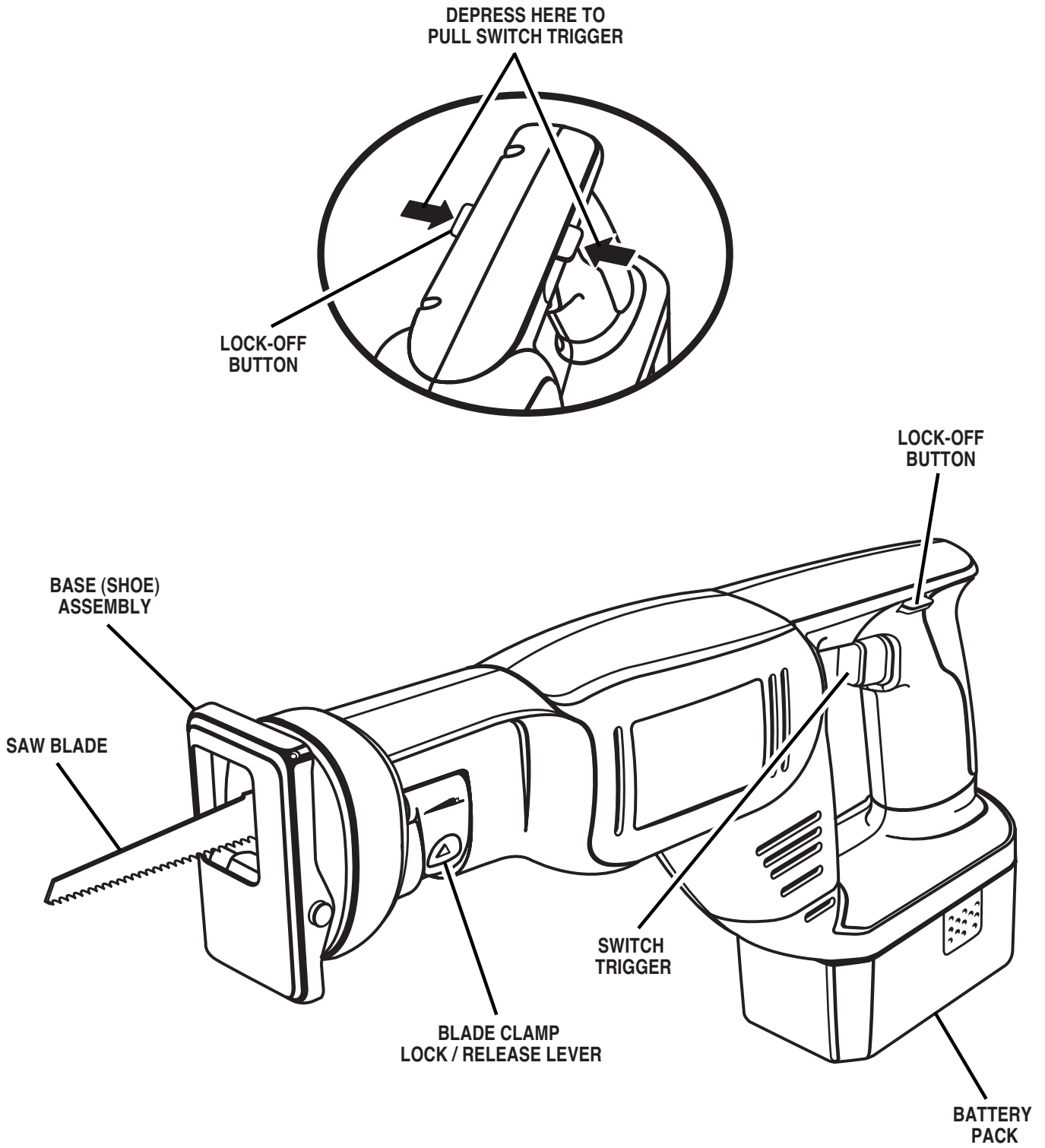


Fig. 1

ASSEMBLY

WARNING:

Always remove battery pack from your saw when you are assembling parts, making adjustments, assembling or removing blades, cleaning, or when not in use. Removing battery pack will prevent accidental starting that could cause serious personal injury.

TO REMOVE / ATTACH BATTERY PACK

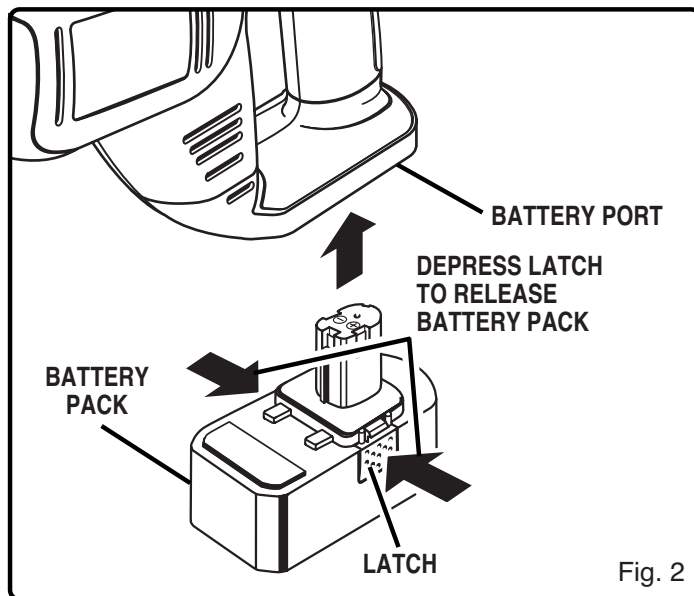
See Figure 2.

TO REMOVE:

- Locate latches on side of battery pack and depress both sides to release battery pack from your saw.
- Remove battery pack from your saw.

TO ATTACH:

- Place the battery pack in your saw aligning raised rib on battery pack with groove in saw's battery port. See Figure 2.
- Make sure the latches on each side of the battery pack snap into place and battery pack is secured to saw before beginning operation.



TO INSTALL SAW BLADE

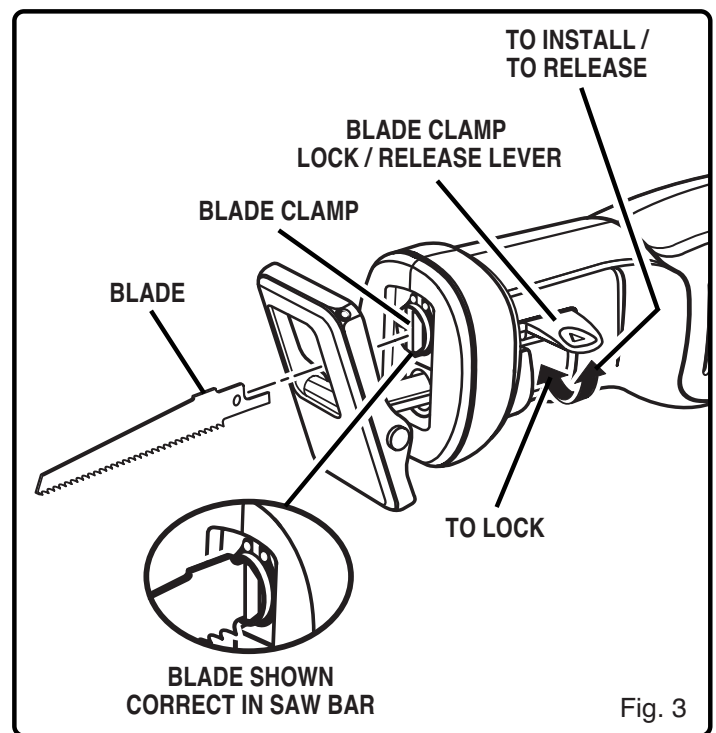
See Figure 3.

- Remove battery pack. See Figure 2.

WARNING:

Failure to remove battery pack from saw could result in accidental starting causing possible serious personal injury.

- Lift blade clamp lock / release lever located on side of saw.
- Insert saw blade between blade clamp and saw bar.
- Lock blade clamp lever.
- Replace battery pack.



OPERATION

LED FUNCTION OF CHARGER

See Figure 4.

LED WILL BE LIGHTED TO INDICATE STATUS OF CHARGER AND BATTERY PACK:

- Red LED lighted = Fast Charging Mode
- Green LED lighted = Fully Charged Battery Pack
- Yellow and Green LED Lighted = Control Charge or Possible Faulty Battery.

CHARGING BATTERY PACK

The battery pack for this tool has been shipped in a low charge condition to prevent possible problems. Therefore, you should charge it prior to use.

Note: Batteries will not reach full charge the first time they are charged. Allow several cycles (cutting followed by recharging) for them to fully charge.

TO CHARGE

- Charge battery pack only with the charger provided.
- **Make sure power supply is normal house voltage, 120 volts, 60 Hz, AC only.**
- Connect charger to power supply.
- Place battery pack in charger. See Figure 5. Align raised rib on battery pack with groove in charger.
- Press down on battery pack to be sure contacts on battery pack engage properly with contacts in charger. When properly connected, red light will turn on.
- Normally, the yellow and green lights on the charger will come on. This indicates charger is in control charge mode and should switch to fast charge mode within 5 minutes. When charger is in fast charge mode the red light will come on. If after a period of 15 minutes the yellow and green lights remain on, remove the battery pack, wait 1 minute and reinsert battery pack in charger. If the yellow and green lights continue to remain on an additional 15 minutes, the battery pack is damaged and will not accept charge.
- When your battery pack becomes fully charged, the red light will turn off and the green light will turn on.
- After normal usage, 1 hour of charge time is required to be fully charged. A minimum charge time of 1 to 1-1/2 hours is required to recharge a completely discharged tool.
- The battery pack will become slightly warm to the touch while charging. This is normal and does not indicate a problem.
- **Do not** place charger in an area of extreme heat or cold. It will work best at normal room temperature.
- When the batteries become fully charged, unplug your charger from power supply and remove the battery pack.

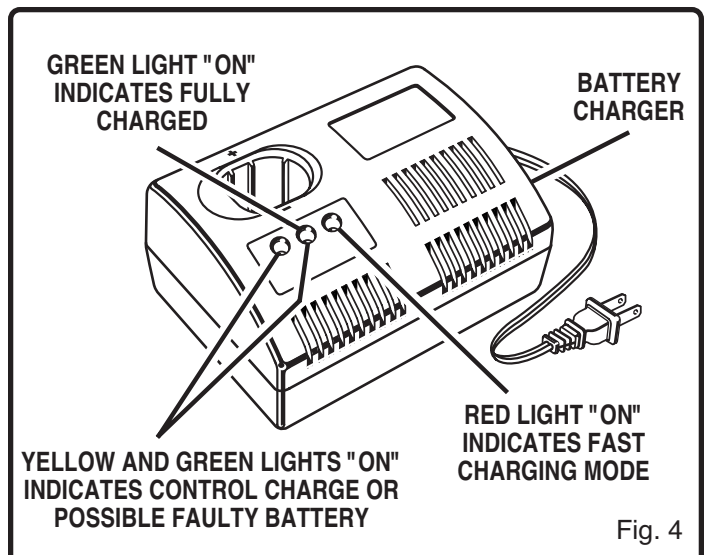


Fig. 4

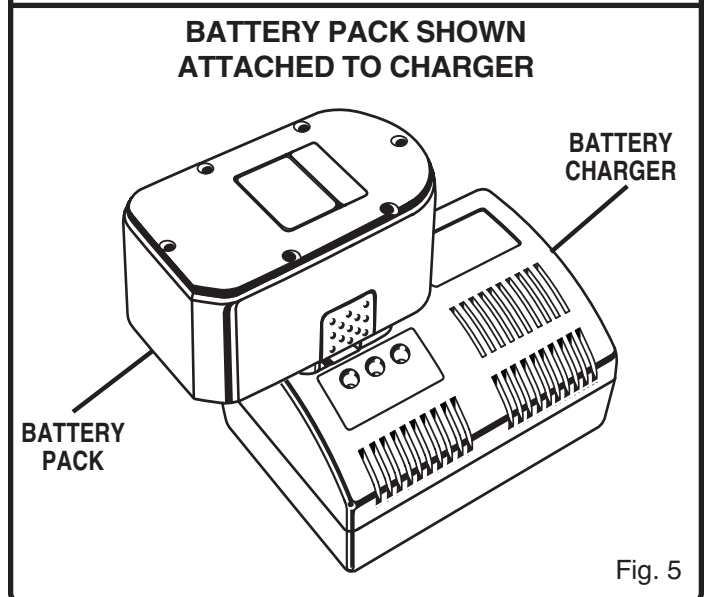


Fig. 5

IMPORTANT INFORMATION FOR RECHARGING HOT BATTERIES

When using your reciprocating saw continuously, the batteries in your battery pack become hot. You should let a hot battery pack cool down for approximately 30 minutes before attempting to recharge.

Note: This situation occurs when continuous use of your saw causes the batteries to become hot. It does not occur under normal circumstances. Refer to "**CHARGING BATTERY PACK**" for normal recharging of batteries. If the charger does not charge your battery pack under normal circumstances, return **both** the battery pack and charger to your nearest **Authorized Service Center** for electrical check.

OPERATION

GENERAL CUTTING

See Figure 6.

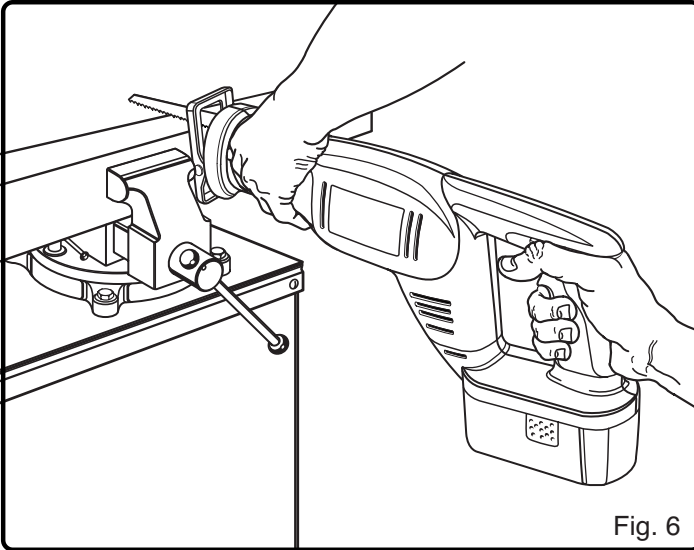


Fig. 6

Hold your saw firmly in front of and clearly away from you. Make sure saw blade is clear of any foreign material. Be sure material to be cut is held firmly. Small work pieces should be securely clamped in a vise or with clamps to the work bench or table. Mark the line of cut clearly. Depress the lock-off button, then pull switch trigger to start the cutting action. Place the base assembly against the work, then move the blade into the work. **Do not force.** Use only enough pressure to keep the saw cutting. Let the blade and saw do the work. Use of excessive pressure that causes bending or twisting of the blade may result in broken blades.

PLUNGE CUTTING

See Figure 7.

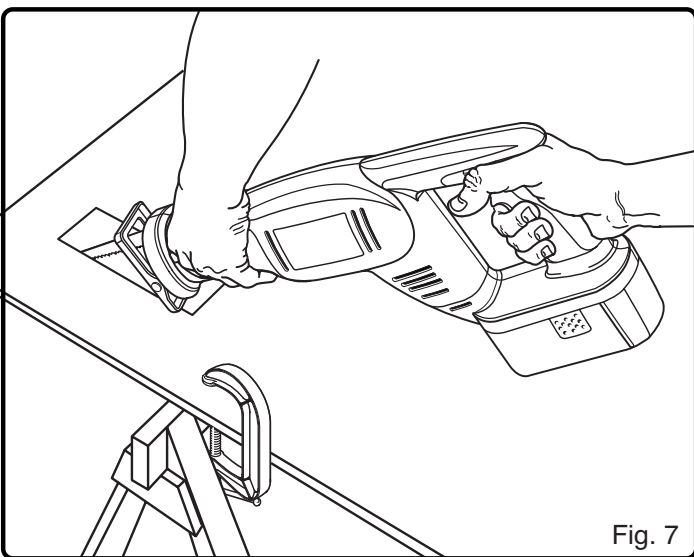


Fig. 7

Mark the line of cut clearly. Choose a convenient starting point inside the area to be cut out and place the tip of the blade over that point. Rest front edge of base (shoe) assembly on work and hold firmly in position. Depress the lock-off button, then pull switch trigger to start the cutting action.

WARNING:

Make sure blade does not touch work until motor reaches full speed, since this could cause loss of control resulting in serious injury.

With saw blade at full cutting speed, slowly tilt saw downward until tip of blade starts cutting work. After blade penetrates work, tilt saw until blade is perpendicular to the work.

METAL CUTTING

See Figure 8.

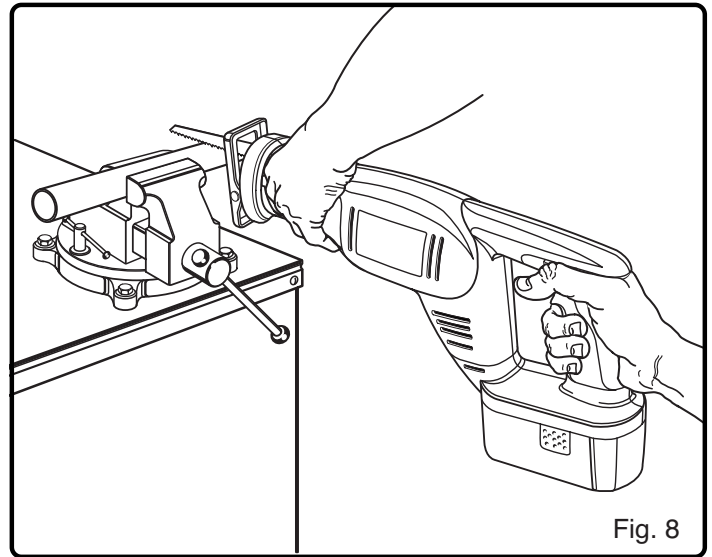


Fig. 8

Metals such as sheet steel, pipe, steel rods, aluminum, brass, and copper may be cut with your saw. Be careful not to twist or bend the saw blade. **Do not force.** We recommend cutting oil when cutting most soft metals and steel. Cutting oil will also keep blades cool, increase cutting action, and prolong blade life.

Never use gasoline since normal sparking of motor could ignite fumes. Clamp the work firmly and cut close to the clamping point to eliminate any vibration of the work being cut. When cutting conduit pipe or angle iron, clamp work in a vise if possible and cut close to the vise. To cut thin sheet material, "sandwich" the material between hardboard or plywood and clamp the layers to eliminate vibration and material tearing.

MAINTENANCE

WARNING:

When servicing use only identical Ryobi replacement parts. Use of any other parts may create a hazard or cause product damage.

Avoid using solvents when cleaning plastic parts. Most plastics are susceptible to damage from various types of commercial solvents and may be damaged by their use. Use clean cloths to remove dirt, carbon dust, etc.

WARNING:

Do not at any time let brake fluids, gasoline, petroleum-based products, penetrating oils, etc. come in contact with plastic parts. They contain chemicals that may damage, weaken, or destroy plastic.

DO NOT ABUSE POWER TOOLS. Abusive practices can damage tool as well as workpiece.

WARNING:

Do not attempt to modify this tool or create accessories not recommended for use with this tool. Any such alteration or modification is misuse and could result in a hazardous condition leading to possible serious personal injury.

BATTERIES

Your saw's battery pack is equipped with nickel-cadmium rechargeable batteries. Length of service from each charging will depend on the type of work you are doing.

The batteries in this tool have been designed to provide maximum trouble free life. However, like all batteries, they will eventually wear out. **Do not** disassemble battery pack and attempt to replace the batteries. Handling of these batteries, especially when wearing rings and jewelry, could result in a serious burn.

To obtain the longest possible battery life, we suggest the following:

- Store and charge your batteries in a cool area. Temperatures above or below normal room temperature will shorten battery life.
- Never store batteries in a discharged condition. Recharge them immediately after they are discharged.
- All batteries gradually lose their charge. The higher the temperature the quicker they lose their charge. If you store your tool for long periods of time without using it, recharge the batteries every month or two. This practice will prolong battery life.



To preserve natural resources, please recycle or dispose of batteries properly.

This product contains nickel-cadmium batteries. Local, state or federal laws may prohibit disposal of nickel-cadmium batteries in ordinary trash.

Consult your local waste authority for information regarding available recycling and/or disposal options.

For more information on battery recycling, call **1-800-8BATTERY.**

BATTERY PACK REMOVAL AND PREPARATION FOR RECYCLING

WARNING:

Upon removal, cover the battery pack's terminals with heavy duty adhesive tape. Do not attempt to destroy or disassemble battery pack or remove any of its components. Nickel-cadmium batteries must be recycled or disposed of properly. Also, never touch both terminals with metal objects and/or body parts as short circuit may result. Keep away from children. Failure to comply with these warnings could result in fire and/or serious injury.



OPERATOR'S MANUAL 18 VOLT CORDLESS RECIPROCATING SAW MODEL NO. RJC181

- **SERVICE**

Now that you have purchased your tool, should a need ever exist for repair parts or service, simply contact your nearest Ryobi Authorized Service Center. Be sure to provide all pertinent facts when you call or visit. Please call 1-800-525-2579 for your nearest Ryobi Authorized Service Center. You can also check our web site at www.ryobitools.com for a complete list of Authorized Service Centers.

- **MODEL NO. AND SERIAL NO.**

The model number of this tool will be found on a plate attached to the motor housing. Please record the serial number in the space provided below.

- **HOW TO ORDER REPAIR PARTS**

WHEN ORDERING REPAIR PARTS,
ALWAYS GIVE THE FOLLOWING INFORMATION:

- MODEL NUMBER **RJC181**
- SERIAL NUMBER _____

RYOBI TECHNOLOGIES, INC.

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